

# SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS REVISION 5, OSHA 29CFR 1910.1200

## Section 1: Chemical Product and Company Identification

**MANUFACTURER'S NAME**

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DATE PREPARED:

June 1, 2015

REVISION DATE: June 16, 2015

PRODUCT NAME:

### BioMaxi RNA Resuspension Buffer

FORMULA:

Preparation/Mixture

PRODUCT USE:

Purification of RNA in Blood

This product is to be used only for Research and Development (R&D) purposes.

## Section 2: Hazards Identification

**GHS Hazard Class**

Acute Toxicity Oral – Category 4  
Skin Corrosion – Category 1C  
Serious Eye Damage – Category 1  
Acute aquatic toxicity – Category 3



Signal word:

Danger

Hazard Statement:

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H402 Harmful to aquatic life.

Precautionary Statements:

Prevention

P260 Do not breathe dust or mist.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink, or smoke when using this product.  
P273 Avoid release to the environment.

Response

P280 Wear protective gloves/protective clothing/ eye protection/face protection.  
P310 Immediately call a POISON CENTER or doctor/ physician.  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P363 Wash contaminated clothing before reuse.

Storage

Disposal

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P405 Store locked up.  
P501 Dispose of waste materials and container by following the waste disposal requirements of your country, state, or local authorities.

Hazards not otherwise classified (HNOC) or not covered by GHS - When in contact with acids, liberates very toxic gas.

HAZARD CLASSIFICATION:

Not classified as hazardous based on IATA, IMDG, and DOT.

FIRE AND EXPLOSION:

Not considered flammable or combustible, but this product will burn if involved in a fire. Product emits toxic fumes when burned.

POTENTIAL HEALTH EFFECTS:

<0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Colorless to pale yellow liquid

NFPA Rating:

Component	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
BioMaxi Resuspension Buffer	3	1	0	-----

## Section 3: Composition, Information on Ingredients

Biomatrica is using the product's SDS as a means of notification to the customer to comply with the TSCA regulations, R&D Exemption 40CFR 720.36 requirements:

1. This product is to be used only for Research and Development (R&D) purposes.
2. A technically qualified individual must supervise the use of this product.
3. Health and Toxicity information is provided in this SDS.

PRODUCT COMPOSITION	APPROX %	CAS NO.	EINECS/ELINCS	CANADA DSL
TS-589599	40-55%	TS	Y	Y
TS-095204	15-30%	TS	Y	Y

Some items on this SDS may be designated as trade secrets (TS). Bonafide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

## Section 4: First Aid Measures

### Description of First Aid Measures

Inhalation	Remove to fresh air immediately. If not breathing, provide CPR (cardio pulmonary resuscitation). If breathing is difficult, give oxygen. Consult a physician.
Skin Contact	Immediately wash skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Cover irritated skin with emollient. Consult a physician..
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Continue rinsing eyes on the way to the hospital. Get medical aid.
Ingestion	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing. Get medical aid.

### Most important symptoms and effects, both acute and delayed

Symptoms/Injuries after Inhalation	May cause respiratory tract irritation.
Symptoms/Injuries after Skin Contact	May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin.
Symptoms/Injuries after Eye Contact	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/Injuries after Ingestion	May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.

### Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately.

## Section 5: Fire-fighting Measures

<b>Suitable extinguishing media</b>	In case of fire use dry powder, water spray, fog or foam. Do not use water jet.
<b>Special hazards arising from the substance or mixture</b>	Carbon oxides, nitrogen oxides (NO <sub>x</sub> ), Sulphur oxides.
<b>Protective actions fire-fighters</b>	Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) and full protective gear to prevent contact with thermal decomposition products. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.
<b>Further information</b>	None

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid aerosol formation. Avoid breathing vapors, mist, or gas.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent spills or contaminated rinse water from entering sewers or watercourses. Do not discharge to the environment.

### Methods and materials for containment and cleaning up

In case of small spills, absorb with inert materials. Do not flush with water. Place in a chemical waste container.

**Reference to other Sections** For personal protection reference section 8. For disposal reference section 13.

## Section 7: Handling and Storage

### Precautions for safe handling

- Take precautionary measures against static discharge.
- Use only with adequate ventilation.
- Avoid formation of aerosols.
- Do not inhale vapors.
- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes, or clothing.
- Appropriate container should be used for disposal.
- For precautions see section 2.

### Conditions for safe storage, including any incompatibilities

- Store upright in a cool, dry place.
- Keep container closed when not in use.
- Utilize chemical segregation.
- Follow all applicable local regulations for handling and storage.

### Specific uses

This product is intended for use in Stabilization of DNA in Saliva;

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH REL
Not applicable	-----	-----	-----

### Exposure controls

VENTILATION:	Always provide good general, mechanical room ventilation where this chemical/material is used.
SPECIAL VENTILATION CONTROLS:	Use this material inside totally enclosed equipment, or use it with local exhaust ventilation at points where vapors can be released into the workspace air.
RESPIRATORY PROTECTION:	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the CEN European Standards (EU). Use a NIOSH/MSHA or European Standard (EN) approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
PROTECTIVE GLOVES:	Nitrile rubber gloves with layer thickness 0.11mm are recommended.
EYE PROTECTION:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
SKIN PROTECTION:	Suitable protective clothing to prevent skin contact. Wear impervious gloves.
WORK/HYGIENE PRACTICES:	Avoid breathing vapor. Avoid contact with eyes. Wash hands after handling.
OTHER EQUIPMENT:	Make safety shower, eyewash stations, and hand washing equipment available in the work area.

## Section 9: Physical and Chemical Properties

	PRODUCT CRITERIA
APPEARANCE - COLOR:	Colorless to Pale Yellow Liquid
PHYSICAL STATE:	Liquid
ODOR:	Odorless
ODOR THRESHOLD	No data available
PH	5.5-6.2
MELTING POINT/FREEZING POINT:	No data available
INITIAL BOILING POINT AND BOILING RANGE:	No data available
FLASH POINT:	No data available
EVAPORATION RATE:	No data available
FLAMMABILITY (Solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	Not Measured
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C):	1.0309-1.1596
SOLUBILITY(IES)	Fully soluble in water.
OXIDIZING PROPERTIES	No data available
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available

## Section 10: Stability and Reactivity

Reactivity:	Not reactive.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	Excess heat, ignition sources; Contact with acids liberates very toxic gas.
Incompatibility (Materials to Avoid):	Strong acids, Strong oxidizing agents, Cyanides.
Hazardous Decomposition Products:	Carbon oxides, nitrogen oxides (NOx), Sulphur oxides.

## Section 11: Toxicological Information

There is no toxicological information available for the product.

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 (Oral/Rat)	594 mg/kg		TS-589599
	LD50 (Intraperitoneal/Mouse)	300 mg/kg		TS-589599
	LD50 (Oral/Rat)	36,700 µL/kg		TS-095204
Skin Corrosion/Irritation		Data not available		
Serious Eye Damage / Eye Irritation		Data not available		
Respiratory or Skin Sensitization		Data not available		
Germ Cell Mutagenicity		Data not available		
Carcinogenicity	NTP	Not listed		
	IARC	Not listed		
	OSHA	Not listed		
Reproductive Toxicity		Data not available		
STOT -- Single Exposure		Data not available		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

## Section 12: Ecological Information

Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia - 42.4 mg/l - 48 h	TS-589599
Persistence and degradability	No information is available.	
Bioaccumulative potential	No information is available.	
Mobility in soil	No information is available.	
PBT and vPvB assessment	PBT/vPvB assessment not available as chemical assessment not required/not conducted	
Other adverse effects	Environmental hazard cannot be completely ruled out in the event of unprofessional handling or disposal. Harmful to aquatic life.	TS-589599

## Section 13: Disposal Considerations

**Waste from residues/unused products:** Follow the waste disposal requirements of your country, state, or local authorities.

**Contaminated packaging:** Contaminated packaging material should be disposed of as stated above for residues and unused product.

**Rinsate:** Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

## Section 14: Transport Information

**DOT TRANSPORT:** Not Regulated

**ADR = International Carriage of Dangerous Goods by Road** Not Regulated

**RAIL TRANSPORT:** Not Regulated

**SEA TRANSPORT:** IMDG Not Regulated

**AIR TRANSPORT:** IATA/ICAO Not Regulated

## Section 15: Regulatory Information

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

TS-589599 (CAS# 593-84-0) is listed on the TSCA inventory.

**OSHA Hazards:** Harmful by ingestion. Corrosive.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

**SARA 311/312 Hazards:** Acute Health Hazard

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Florida Toxic Substance(s):	Not listed
Massachusetts's hazardous substance(s):	Not listed
Pennsylvania hazardous substance code(s):	Not listed
New Jersey	Not listed
Illinois	Not listed
Michigan	Not listed
Minnesota	Not listed

CANADA:

This SDS contains all of the information required by the Controlled Products Regulations (CPR).

WHMIS-INFORMATION:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), SOR/88-66, Current to February 20, 2012. The classes of controlled products listed in the CPR, Section 32, Part IV, have been reviewed and based on Professional Judgment this product has been determined to not be WHMIS controlled.

EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

## Section 16: Other Information

Initial issue date: June 1, 2015  
Final revision date: June 16, 2015  
Revision Number: 0  
Revision explanation: Initial version  
Information Sources: RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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